**Math Lesson Plan**

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| **Teacher:** | | | **Grade: 4th** | | | **Date(s)**: 8/27 (Day 1) |
| **Unit Title: Understand Place Value for Multi-Digit Whole Numbers** | | | | **Corresponding Unit Task: Task 1** | | |
| **Essential Question(s): How can I represent a multi-digit number using different forms?** | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  **Puzzle pieces**  **OH of PVH**  **Vocabulary Powerpoint** | | **Student:**  **Math journals**  **Place Value Houses sheet; whiteboards and dry erase markers**  **Base 10 blocks/cubes** | | | **Standard Form**  **Expanded Form**  **Word Form** | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards: *4.NBT.2* -** *Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.* | | | | | |
| **I Can Statement(s):**   * **I can write a whole multi-digit number using base-ten numerals** * **I can write a whole multi-digit number using words** * **I can write a whole multi-digit number in expanded form.** | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  Students will be given a puzzle piece on which a number is written in either standard or expanded form. Students will need to find their partners that have the other matching form of their number. Students will be given 3 – 4 minutes to complete this task. Then partners will work together to write the word form of their number on a white board. | | | | | |
| **Teacher Directed:**  Teacher will go over the key vocabulary for the lesson (power point presentation). Students will use a Frayer model (or other graphic organizer) for each vocabulary word which will be recorded in their math journal. Model for students writing each form. Provide additional numbers as examples for students and guide them through the exploration process. Students can use base ten blocks and cubes if needed. | | | | | |
| **Guided Practice:** Pass out place value houses sheet to students. Using overhead copy to model, give several examples for students to orally read and write into the houses on the top of the sheet. Emphasize how the periods in the place value chart just repeat. (Students will be given more practice with this concept on Day 3). | | | | | |
| **Independent Practice:**  Puzzle partners will use their number and place it correctly in the “house” on the bottom of the sheet. Next, they will create 3 more numbers: 2, 3 and 4-digits and write them in standard, expanded and written form; and finally place them in the “house”. | | | | | |
| **Closing/Summarizing Strategy:**  Each student pulls one of the puzzle pieces from a bag and reads it aloud. | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| * Have students explore number and word form for their numbers: Ex. the idea that 285 can also be written as 28 tens and 5 ones * Using the PVH sheet, students create up to 7-digit numerals. | | | * For difficulty with written form, provide and review number words. * Use base 10 blocks to help students visually see the numerals * Provide students with partially completed forms of a number. Student fills in the missing information. | | | * Provide a list of number words with the numeral beside it. |
| **Assessment(s):** Puzzle pieces,Place Value House sheet | | | | | | |
| **Teacher Reflection:** (Next steps?) | | | | | | |